

**REMARKS**

This Response and Amendment is filed in reply to the Office Action dated June 27, 2006. By this Amendment, claims 1, 9, 18, 20-22, 24-31, 33 and 40 are amended and claim 19 is cancelled, leaving claims 2-8, 10-17, 23, 32, 34-39 and 41-56 unchanged.

**Claim Objections**

On page 2 of the Office Action, claims 32, 42 and 55 are objected to for the various informalities.

Specifically, claim 32 is objected to because the word “the” did not appear between the words “...shelf to” and “front of the support...”. Applicants agree with the Examiner that the word “the” should appear between these two phrases, but believes that it is present in the original claim, as shown in the application number PCT/US03/11698 to which the Applicant claims priority. Applicant has included a full listing of the claims with this Amendment, which includes the original claim 32 having the word “the” between the words “... shelf to” and “front of the support...”. Accordingly, the Applicant hereby requests withdrawal of the objection to claim 32.

Regarding claim 42, the Examiner notes that the word “to” is required between the words “... are adjacent” and “one another”. Applicants respectfully submit that the current use of adjacent (without being followed by the term “to”) is proper English use of the term “adjacent”. Specifically, this usage does not require the word “to” in order to adequately describe the relationship between the first and second shelves. Accordingly, the Applicant hereby requests withdrawal of the objection to claim 42.

Regarding claim 55, the Examiner objects to the claim for the phrase “... in one of a forward and rearward direction...”, and suggest that the Applicant changes the phrase to state “... in one of a forward or a rearward direction...”. Applicants have set forth a Markush-type claim by using the phrase “...in one of a forward and a rearward direction...” (emphasis added), that requires that a shelf be cantilevered in either a forward or a rearward direction. The Applicant believes that this is the proper phrasing for a Markush-type claim. See MPEP 2173.05(h). Accordingly, the Applicant hereby requests withdrawal of the objection to claim 55.

### **35 U.S.C. §112(2) Rejections**

On pages 2 and 3 of the Office Action, claims 9, 15 and 16 are rejected under 35 U.S.C. as being §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the invention. Claim 9, lines 12, 13 and claims 15 and 16, lines 6, 7 call for a cantilevered shelf to be supported upon a support post “at least partially” via a connector. The Applicant respectfully submits that this claim language is clear. In particular, a shelf can be supported at one end in cantilevered fashion, while at the same time being connected for such support by more than one connector (e.g., multiple pins together cooperating to support a shelf in cantilevered fashion, such as those illustrated in Fig. 6 of the present application as originally filed). If two or more connectors are used, each connector can be “at least partially” supporting the shelf, even though it is supported in cantilevered fashion at one end.

Claims 22, 26 and 28 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the present invention. The Applicant hereby amends claims 22 and 24-31 to more appropriately clearly reflect the relationship of the shelf having connectors and the post or posts having mating connectors.

### **35 U.S.C. § 102 Rejections**

On page 3 of the Office Action, claims 1-3 and 5-6 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,184,068 issued to Wende.

Claim 1 is hereby amended, and calls for:

A modular shelving system, comprising:

first and second support posts laterally spaced from one another;

the first support post having a first plurality of connectors extending laterally from an exterior of the first support post;

the second support post having a second plurality of connectors extending laterally from an exterior of the second support post; and

a first cantilevered shelf releasably attached at an elevation to at least one of the first plurality of connectors at a location exterior to the first support post and at least one of the second plurality of connectors at a location exterior to the second support post, the first cantilevered shelf supported in cantilevered fashion solely at a rear end of the cantilevered shelf, the shelf being adjustable to different heights along the first and second support posts by releasable attachment to different connectors of the first and second plurality of connectors at respective locations exterior to the first and second support posts, the first cantilevered shelf comprising:

a first side bracket;

a second side bracket; and

at least one cross member extending between the first side bracket and the second side bracket;

wherein at least one of the first and second support posts is adapted for releasable attachment to a second cantilevered shelf at the elevation of the first cantilevered shelf.  
(Amendment marks not shown).

In contrast, Wende discloses a display rack that supports both the front and the back portions of each shelf, as opposed to supporting a shelf in cantilevered fashion. The shelves of Wende have two side brackets 5, 5', 6, 6'. Each side bracket is supported at a rear end by connectors 11, 11', 12, 12', 22, 22' and at a front end by struts 15, 15', 16, 16' and bolts 19, 19', 20, 20'. The definition of "cantilever" according to [www.dictionary.com](http://www.dictionary.com) is as follows: "[a] projecting structure, such as a beam, that is supported at one end and carries a load at the other end or along its length." Wende does not disclose a shelving system that supports the shelves in a cantilevered fashion solely at one end (e.g., a rear end) of the cantilevered shelf, as called for in amended claim 1. Instead, Wende discloses a rack that supports shelves at both front and rear ends.

Additionally, Wende teaches a shelving system having two uprights that each have one side of a shelf connected thereto. Wende fails to teach, describe, or suggest a shelving system wherein at least one of the first and second support posts is adapted for releasable attachment to a second cantilevered shelf at the elevation of the first cantilevered shelf. Rather, Wende teaches a single shelf being supported by two uprights 1, 2 and neither discloses nor suggests connecting two shelves to one upright at the same elevation. In fact, with the structural arrangement of Wende, supporting two shelves at the same elevation is not possible, because each upright has only one slot at any given elevation.

Finally, Wende teaches a shelving system that has first and second support posts 1, 2 laterally spaced from one another. Each support post has apertures that extend through the post in a front-to-rear direction. Wende fails to disclose the posts having pluralities of connectors that extend *laterally* from an exterior of the support post. Laterally has already been defined by the Examiner as being in a side-by-side relationship, as the uprights 1, 2 of the Wende rack. The apertures 3, 4 therefore cannot fairly re-define the term “laterally” as being in front-to-back orientation.

Accordingly, and for other reasons not discussed herein, Wende fails to teach, describe, or suggest the modular shelving system of amended claim 1. Withdrawal of the 35 U.S.C. §102(b) rejections of amended claim 1 is therefore respectfully requested.

Claims 2, 3, 5, and 6 are each ultimately dependent upon amended claim 1, and are therefore allowable based upon amended claim 1 and upon other features and elements claimed in claims 2, 3, 5 and 6 but not discussed herein. Withdrawal of the 35 U.S.C. §102(b) rejections of claims 1-3 and 5-6 is therefore respectfully requested.

On page 4 of the Office Action, claims 18-21 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,561,608 issued to Weider.

Claim 18 is hereby amended, and calls for:

A post for supporting cantilevered shelves in a shelving assembly having a front and a rear, the post comprising:

a periphery having

a front surface substantially facing the front of the shelving assembly;

a rear surface opposite the front surface;

a first side adjacent to the front surface; and

a second side adjacent the front surface and opposite the first side;

a plurality of connectors extending from at least one of the first side and the second side of the post, at least a portion of each connector located exterior to the post and adapted for connection to at least two cantilevered shelves at a common elevation wherein the plurality of connectors are a plurality of pins welded to the at least one of the first side and the second side of the post and to which connectors on the cantilevered shelf engage. (Amendment marks not shown).

In contrast, Weider discloses a post for supporting a rack structure 11 having a lateral bracket support assembly 45, a lateral bracket support arm 47, a mounting member 49 and bolts 51, which Examiner appears to collectively compare to the plurality of connectors claimed in claim 18. However, amended claim 18 further requires that the plurality of connectors are a plurality of pins welded to the post to which connectors on the cantilevered shelf can engage. The structure of Weider noted by the Examiner bracket support assembly, bracket support arm, mounting member, and bolts are significantly different in form and function to the plurality of pins claimed in amended claim 18, and are not adapted for engagement with connectors on a cantilevered shelf as also claimed in amended claim 18. Indeed, Weider fails to provide any suggestion or motivation regarding why such a structure as claimed in amended claim 18 would be necessary or desirable, nor why modification of the Weider structure to a form similar to that claimed in amended claim 18 would provide any benefit or value.

Further, the Applicant respectfully submits that the posts and connectors of Weider (as identified by the Examiner) are not capable supporting a cantilevered shelf, nor could they be adapted to support a cantilevered shelf. Weider clearly discloses four corner posts and

connectors that support the shelves at all corners, as opposed to the posts and connectors of amended claim 18 that support at least two cantilevered shelves.

Accordingly, and for other reasons not discussed herein, Weider fails to teach, describe, or suggest the post of amended claim 18. Withdrawal of the 35 U.S.C. §102(b) rejection of claim 18 is therefore respectfully requested.

Claims 20 and 21 are each dependent upon amended claim 18, and are therefore allowable based upon amended claim 18 and upon other features and elements claimed in claims 20 and 21 but not discussed herein. Withdrawal of the 35 U.S.C. §102(b) rejections of claims 20 and 21 is therefore respectfully requested.

Also on pages 3 and 4 of the Office Action, claims 9-17 and 22-37 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,592,286 issued to Trubiano.

Claim 9 is hereby amended and calls for:

A method of mounting cantilevered shelves to a support post having a front surface oriented to face a front of a shelving assembly, a rear surface oriented to face a rear of the shelving assembly, and a side surface oriented laterally to face a side of the shelving assembly, the method comprising:

selecting a desired height of a first cantilevered shelf with respect to the support post, the support post having a plurality of connectors at different heights along the support post, each of the plurality of connectors extending laterally away from the support post;

selecting a connector from the plurality of connectors;

positioning a part of the first cantilevered shelf at a location adjacent an exterior surface of the support post, the location having an elevation;

attaching the first cantilevered shelf to the connector at the location solely at a rear end of the cantilevered shelf;

supporting the first cantilevered shelf solely at the rear end of the cantilevered shelf and upon the support post at least partially via the connector; and

attaching a second cantilevered shelf to the support post at the elevation.

(Amendment marks not shown).

Claim 22 is also hereby amended, and calls for:

A method for supporting cantilevered shelves, the method comprising:

providing first and second support posts laterally spaced from one another, each of the first and second support posts having a front, a rear, and opposing sides, wherein the first support post has a plurality of first connectors extending substantially laterally from the first support post and located at a first plurality of heights on the first support post, and wherein the second support post has a plurality of second connectors extending substantially laterally from the second support post and located at a second plurality of heights on the second support post;

selecting a height for a first shelf by selecting at least one connector from the plurality of first connectors extending from the first support post and at least one connector from the plurality of second connectors extending from the second support post;

positioning third and fourth connectors on the first shelf at respective locations exterior to the first and second support posts, the respective locations having an elevation;

releasably attaching the third and fourth connectors on the first shelf to the first and second connectors selected on the first and second support posts at the locations; and

cantilevering the first shelf from the first and second support posts solely at a rear end of the cantilevered shelf;

wherein one of the plurality of first connectors extending from the first support post is positioned for releasable attachment to a second shelf at the elevation.

(Amendment marks not shown).

Claim 33 is also hereby amended, and calls for:

A modular shelving system, comprising:

a support post having a front, a rear, and opposing first and second sides;

a plurality of fastening locations on the first and second sides of the support post, the plurality of fastening locations being exterior to the support post;

a first shelf releasably attached to a location of the plurality of fastening locations on the first side of the support post, the first shelf cantilevered from the support post solely at a rear end of the front cantilevered shelf and extending forwardly from the support post; and

a second shelf releasably attached to a location of the plurality of fastening locations on the second side of the support post, the second shelf cantilevered from the support post solely at a rear end of the second cantilevered shelf and extending forwardly from the support post. (Amendment marks not shown).

In contrast, Trubiano discloses a shelf corner support structure that supports one shelf 11 on four support posts 12 (rather than in cantilevered fashion) by inserting arms 14, 14' attached to the posts 12 into bores 20 and notches 21 on the shelf 11, wherein bridge plates 25 are inserted into bores 20 on the shelf 11 to support a second shelf 11' from the first shelf 11 by the bridge plate 25. (See Trubiano, col. 1, lines 36-39 and col. 2, lines 55-59). The bridge plate 25 has a

vertical slot 32 in an outer surface 33 that defines a line of weakness designed to break in order to create two separate plate sections in response to a force in the direction of arrow 34 in Fig. 7. When the bridge plate 25 is broken, the second shelf 11' can be removed from the first shelf 11 without having to dismantle the entire shelving assembly. See Trubiano, col. 3, lines 26-34.

Regarding amended claims 9, 22, and 33, Trubiano fails to teach, describe, or suggest a method of mounting *cantilevered* shelves to a support post. Instead, Trubiano discloses a method of supporting one shelf from four corner support posts in a non-cantilevered fashion. Reference is hereby made to the discussion above regarding claim 1 and the term “cantilevered”.

Also regarding claim 9 and 22, and 33, Trubiano fails to teach, describe, or suggest a method for supporting cantilevered shelves that includes cantilevering a first shelf from first and second support posts *solely at a rear end* of the cantilevered shelf, or attaching a cantilevered shelf to a connector at a location *solely at a rear end* of the cantilevered shelf, or a shelf cantilevered from a support post *solely at a rear end* of the cantilevered shelf. Instead, Trubiano discloses supporting a first shelf in a *non-cantilevered* fashion from four support posts at *both* a rear end and a front end of the shelf. It is also important to note that Trubiano is not capable of supporting shelves in a cantilevered fashion because the bridge plate 25 is designed to break upon receiving a transverse force (i.e., a force that would be exerted by a cantilevered shelf). The shelves of Trubiano are not capable of supporting shelves in a cantilevered fashion because the bridge plate would break under the force of bearing the weight of the shelves solely at a rear end. Reference is also hereby made to the discussion of amended claim 9 above.

Trubiano further fails to teach, describe, or suggest one of a plurality of first and second connectors extending from a first support post and positioned for releasable attachment to a second shelf at a common elevation as claimed in amended claim 22. Instead, Trubiano discloses first and second arms 14, 14', 15, 15' that are received within bores and notches 20, 21 of a shelf 11. The bores and notches 20, 21 receive a bridge plate 25 that supports a second shelf. To remove the second shelf from the bridge plate and the first shelf, the bridge plate is broken in half. The first and second arms 14, 14', 15, 15' and/or the bridge plate 25 of Trubiano are not positioned for releasable attachment to the second shelf of Trubiano. Even if the Examiner reads

Trubiano to have an *indirect* connection between the first and second support posts and the second shelf, it is required that the bridge plate be broken in order to release the second shelf from the first shelf. That teaches away from the application because the application discloses that the shelves are selectively attached and detached without requiring the breaking of any of the components or connectors.

Regarding claim 33, Trubiano fails to teach, describe, or suggest a first shelf cantilevered from a support post solely at a rear end of the first cantilevered shelf and extending *forwardly* from the support post; and a second shelf cantilevered from the support post solely at a rear end of the second cantilevered shelf and extending *forwardly* from the support post. Instead, Trubiano discloses a first shelf 11 supported from four support posts 12 *at both a front end and a rear end* of the shelf 11. Trubiano further discloses a second shelf that is *supported from the first shelf*. Trubiano not only fails to disclose cantilevering the first shelf from a support post, but also fails to disclose cantilevering the second shelf from the support post. Further, Trubiano fails to disclose having the shelves both extending forwardly from a support post.

Accordingly, and for other reasons not discussed herein, Trubiano fails to teach, describe, or suggest the method of mounting cantilevered shelves to a support post of amended claim 9, the method for supporting cantilevered shelves of amended claim 22 or the modular shelving system of amended claim 33. Withdrawal of the 35 U.S.C. §102(b) rejections of claims 9, 22 and 33 is therefore respectfully requested.

Claims 10-17, 23-32 and 34-37 are each ultimately dependent upon amended claims 9, 22 and 33, respectively, and are therefore allowable based upon amended claims 9, 22 and 33, and upon other features and elements claimed in claims 10-17, 23-32 and 34-37 but not discussed herein. Withdrawal of the 35 U.S.C. §102(b) rejections of claims 9-17, 22-37 is therefore respectfully requested.

On pages 4 and 5 of the Office Action, claims 33 and 38-56 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,655,740 issued to Lazarus.

Claim 33 is hereby amended, and calls for:

A modular shelving system, comprising:  
a support post having a front, a rear, and opposing first and second sides;  
a plurality of fastening locations on the first and second sides of the support post, the plurality of fastening locations being exterior to the support post;  
a first shelf releasably attached to a location of the plurality of fastening locations on the first side of the support post, the first shelf cantilevered from the support post solely at a rear end of the front cantilevered shelf and extending forwardly from the support post; and  
a second shelf releasably attached to a location of the plurality of fastening locations on the second side of the support post, the second shelf cantilevered from the support post solely at a rear end of the second cantilevered shelf and extending forwardly from the support post. (Amendment marks not shown).

Claim 40 is also hereby amended, and calls for:

A modular shelving system, comprising:  
a support post having a front, a rear, and opposing first and second sides;  
a plurality of fastening locations on the first and second sides of the support post;  
a first shelf extending to a first exterior location on the first side of the support post and releasably attached to the support post solely at a rear end of the first shelf at the first exterior location, the first shelf cantilevered from the support post and extending forwardly from the post; and  
a second shelf extending to a second exterior location on the second side of the support post and releasably attached to the support post at the second exterior location, the second shelf cantilevered from the support post solely at a rear end of the second shelf and extending rearwardly from the support post. (Amendment marks not shown).

In contrast, Lazarus discloses a shelving system having first and second shelves supported along side edges of the shelves 32 by shelf hangers 16 (see Lazarus, Figs. 6A-6D), rather than being supported in a cantilevered fashion such that the shelves are cantilevered from the support posts solely at a rear end of the shelves as claimed in amended claims 33 and 40. In this regard, reference is hereby made to the remarks above regarding claims 1, 9 and 22, and the term "cantilevered". In short, the shelves 32 of the Lazarus shelving system are not cantilevered "from the support post solely at a rear end of the ... shelf" as claimed in amended claims 33 and 40. Lazarus also fails to provide any teaching or suggestion why a structure having such a feature (alone or in combination with other features) would be desirable.

Accordingly, and for other reasons not discussed herein, Lazarus fails to teach, describe, or suggest the modular shelving system of amended claims 33 and 40. Withdrawal of the 35 U.S.C. §102(b) rejections of amended claims 33 and 40 is therefore respectfully requested.

Claims 38, 39 and 41-48 are each ultimately dependent upon amended claims 33 and 40, respectively, and are therefore allowable based upon amended claims 33 and 40 and upon other features and elements claimed in claims 38, 39 and 41-48 but not discussed herein. Withdrawal of the 35 U.S.C. §102(b) rejections of claims 38, 39, and 41-48 is therefore respectfully requested.

Claim 49 calls for:

A cantilevered shelf releasably connectable to first and second posts at a plurality of different heights along the first and second posts, each post having a front, a rear, and opposed sides, the cantilevered shelf comprising:

a first flange having an end releasably engagable with an exterior surface of one of the opposing sides of the first post, the first flange shaped to extend across less than an entire front of the first post to define a bearing surface of the first flange abutting the front of the first post;

a second flange having an end releasably engagable with an exterior surface of one of the opposing sides of the second post, the second flange shaped to extend across less than an entire front of the second post to define a bearing surface of the second flange abutting the front of the second post; and

a shelf body attached to and extending between the first flange and the second flange.

Also, claim 55 calls for:

A method for supporting a cantilevered shelf, the method comprising:

providing a first post and second post, the first post laterally spaced from the second post,

selecting a height of a shelf upon the first and second posts;

connecting a first portion of the shelf with an exterior surface on a side of the first post;

connecting a second portion of the shelf with an exterior surface on a side of the second post;

cantilevering the shelf from the first and second posts in one of a forward and rearward direction with respect to the first and second posts;

abutting the shelf against less than an entire front of the first post; and

abutting the shelf against less than an entire front of the second post.

In contrast, although Lazarus discloses supporting first and second shelves 32 from support posts 50 in either a forward or a rearward direction, with each shelf 32 having a flange 33 (see Fig 6A of Lazarus) or folded sheet metal end 54 (see Fig. 6C of Lazarus), Lazarus fails to disclose or suggest abutting the shelf or shelf flanges of the shelf against a front or front portion of either support post. Instead, Lazarus only discloses a shelf 32 hanging from shelf hangers 16 without contact, abutment, or interference with a support post. In fact, based upon the drawings and assembly description provided by Lazarus, it would appear that any such relationship between a shelf 32 and a support post of the Lazarus system is undesirable – a conclusion that is precisely the opposite of what is claimed in claims 49 and 55.

Lazarus further discloses a shelving system having first and second shelves 32 supported along side edges with shelf hangers 16 (see Figs. 6A-6D of Lazarus). Each shelf 32 is supported along both side edges by shelf hangers 16, rather than being supporting in a cantilevered fashion as claimed in claims 49 and 55.

Accordingly, and for other reasons not discussed herein, Lazarus fails to teach, describe, or suggest the cantilevered shelf of claim 49 or the method for supporting a cantilevered shelf of claim 55. Withdrawal of the 35 U.S.C. §102(b) rejections of claims 49 and 55 is therefore respectfully requested.

Claims 50-54 and 56 are each ultimately dependent upon claims 49 and 55, respectively, and are therefore allowable based upon claims 49 and 55 and upon other features and elements claimed in claims 50-54 and 56 but not discussed herein. Withdrawal of the 35 U.S.C. §102(b) rejections of claims 49-56 is therefore respectfully requested.

### **35 U.S.C. § 103 Rejections**

On pages 5 and 6 of the Office Action, claims 4 and 8 are rejected under 35 U.S.C. §103(a) as being unpatentable over Wende in view of U.S. Patent No. 4,197,950 issued to Ovitz. Also on pages 5 and 6 of the Office Action, claim 7 is rejected under 35 U.S.C. §103(a) as being unpatentable over Wende in view of Weider.

Claims 4, 7 and 8 are each dependent upon amended claim 1, and are therefore allowable based upon amended claim 1 and upon other features and elements claimed in claims 4, 7 and 8 but not discussed herein. Withdrawal of the 35 U.S.C. §103(a) rejections of claims 4, 7 and 8 is therefore respectfully requested.

If any issues remain outstanding upon entry of this Amendment, the Examiner is respectfully requested to telephone the undersigned Applicant's Representative at (414) 225-8266.

Respectfully submitted,

BY



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